



Department of Energy

Washington, DC 20585

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MEMORANDUM FOR DISTRIBUTION

FROM:

MARK B. WHITAKER, JR.

DEPARTMENTAL REPRESENTATIVE TO THE
DEFENSE NUCLEAR FACILITIES SAFETY BOARD
OFFICE OF HEALTH, SAFETY AND SECURITY

SUBJECT:

Facility Representative Program Performance Indicators Quarterly
Report, October – December (4th Quarter CY2007)

Attached is the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period from October to December 2007. Data for these indicators are gathered by Field elements quarterly per DOE-STD-1063-2006, *Facility Representatives*, and reported to Headquarters program offices for evaluation and feedback to improve the FR Program. A summary of this quarter's data concluded:

- 83% Fully Qualified (last Quarter was 82%)
- 85% Staffing Level (last Quarter was 93%)
- 45% Time Spent in the Field (DOE goal is >40%)
- 73% Time Spent in Oversight Activities (DOE Goal is > 65%)

Percentages are based on FR staffing analyses at 214 Full Time Equivalent (FTEs) and 182.5 FTEs actual staffing. Fully qualified FR totals for this period broken down by program were as follows: EM had 91% fully qualified, NE had 91% fully qualified, NNSA had 70% fully qualified, and SC had 80% fully qualified. The DOE goal for fully qualified FRs is greater than 80%.

Current FR information and past quarterly performance indicator reports are accessible at the Facility Representative web site at <http://www.hss.doe.gov/deprep/facrep/>. Should you have any questions or comments on this report, please contact me or the DOE Facility Representative Program Manager, James Heffner, at (202) 586-3690.

Attachment



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Roger Gordon, RL
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Linda Quarles, SRS
Steve Goff, SRS
Carroll McFall, SRSO
Allen Tate, SSO
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ENVIRONMENTAL MANAGEMENT SITES

Facility Representative Program Performance Indicators (4QCY2007)

<u>Field or Ops Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
CBFO	2	2	2	100	0	100	50	66	86
ID (EM)	13	12	9	69	1	100	100	44	83
OR (EM)***	19	17	16	84	0	94	88	49	72
ORP	14	14	14	100	0	100	93	48	67
PPPO	4	4	4	100	0	100	100	42	71
RL	19	19	19	100	0	100	100	45	73
SR	38	38	26	68	0	92	85	46	70
WVDP	2	2	1	50	1	100	100	35	65
EM Totals	111	108	91	82	2	97	91	47	72
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

* % Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

** % Oversight Time includes % Field Time

*** The Oak Ridge Office belongs to the Office of Science; however, EM FRs are located here.

EM Facility Representative (FR) Highlights:

- ID (EM): A Waste Disposition Project (WDP) FR was deployed to the CBFO for a 30-day detail. The FR performed oversight on the WIPP facility, evaluations of internal CBFO documents, and assisted in the development of an interim FR qualification checklist.
- ID (EM): A WDP FR noted a negative trend in work control issues over a period of several months. The negative trend was communicated to the contractor as a "concern," which resulted in the contractor performing a formal causal analysis and identification of corrective actions.
- ID (EM): During backshift surveillance, a WDP FR noted the contractor preparing to use supplemental 500,000 Btu heaters without following their work control procedure. The heaters were being prepared to be put into service without going through the hazard identification and mitigation process required by the work control procedures.
- ID (EM): One FR transferred to a Senior NE FR position. A replacement hire is anticipated to start during the next quarter.
- OR (EM): An FR provided oversight on work being performed at Building 3019 for operations planning.
- OR (EM): FRs continued support at Molten Salt Reactor Experiment by: providing significant oversight in preparation for operation; providing oversight of transition activities of moving process equipment from Tank #2 to Tank #1; providing oversight by observing a wide variety of work activities associated with the Fuel Salt Disposition Project; and providing oversight on work being performed at nine material storage facilities and two mobile facilities for vent and purge activities (V&P).
- OR (EM): FRs continued support for the K-25/27 D&D Project through: oversight of Bechtel Jacobs Company (BJC) Management processes and work activities; engineering visual inspection of high mass components; drilling and foaming of converters, compressors, and P.G. piping; asbestos abatement activities; and installation of nets and barriers.
- OR (EM): FRs continued support of TRU Waste Processing Facility in preparation of upcoming MSA and ORR with on-sight visits being conducted by EPA, CBFO, and DNFSB.

- ORP: An FR found and stopped a worker who was removing zinc coating without proper ventilation. The worker was wearing respiratory protection but there were numerous other workers in the same small area who were being exposed to zinc dust without respiratory protection.
- ORP: An FR found that several Hot Work requirements under NFPA 51B and the contractor's procedures were not being implemented.
- ORP: An FR identified that hazard controls for performing abrasive blasting were missing from the contractor's Job Hazard Analysis (JHA) documentation. Previous revisions to the JHA for placing concrete had deleted the controls with the intention of issuing a separate JHA for abrasive blasting. Contractor abrasive blasting was suspended until a new JHA was issued.
- ORP: An FR observed and corrected repeated inadequacies in three-way communications where three-way communications were required.
- ORP: During a review of subcontractor's Fall Protection Plan, the FR determined that the plan was deficient in its implementation and compliance oversight.
- ORP: While touring the Laboratory facility construction site, an FR observed a subcontractor worker wearing no respiratory protection. The workers were welding in a permit required confined space. The welder was wearing a Positive Air Purifying Respirator welding hood, while his assistant, who was in close proximity, was wearing no respirator. The FR discussed the situation with the subcontractor's safety representative who agreed and implemented respiratory protection for the welding assistant.
- PPPO: An FR participated in initial discovery and review of intentional violation of inventory controls for an onsite shipment of nuclear materials.
- PPPO: An FR participated in the review and approval of the contractor Project Quality Assurance Plan for the construction and upcoming operation of the conversion facility for depleted uranium fluoride.
- PPPO: An FR participated in the review and approval of the contractor Transportation Safety Document for the Portsmouth Site.
- RL: An FR identified Site Wide Lockout/Tag out (LOTO) Committee concerns to RL Management resulting in RL/ORP direction to contractors regarding expectations of the Site Wide LOTO Program.
- RL: An FR identified sloppy Radcon work practices within a High Contaminated Area during sand and filter sluicing/equipment installation that resulted in improved practices.
- RL: An FR identified that a TSR related to Abnormal Container Management Program (ACMP) was not being met. The condition was brought to the attention of the contractor and subsequently a Potential Inadequacy in the Safety Analysis and Unreviewed Safety Questions (USQ) were declared.
- RL: An FR was assigned to ORP to coordinate the development of a corrective action plan addressing the Judgments of Need from the Type A Accident Investigation Board Report of the July 27, 2007 Tank 241-S-102 waste spill.
- RL: FRs participated in an Integrated Safety Management System (ISMS) Phase II Verification on River Corridor Project (RCP).
- RL: FRs performed core surveillances at various Project Hanford Management Contract (PHMC) projects/facilities

to evaluate the effectiveness of the contractor's Corrective Action/Issue Management.

- SR: An Assistant Manager for Nuclear Material Stabilization Project (AMNMSP) FR discovered a breach in containment for an inactive reactor facility (HWCTR) which had gone undetected for an extended period of time due to the failure to perform required annual inspections for approximately seven years.
- SR: An Assistant Manager for Waste Disposition Project (AMWDP) FR participated in a one week Special Assessment of a personnel contamination event at the Solid Waste Management Facility Modular Repackaging System. The assessment team was led by the AMWDP Operations Division Director.
- SR: An Office of Safeguards Security and Emergency Services (OSSES) FR is assisting in writing an RFP, as part of an Integrated Process Team at the DOE Consolidated Business Center, for the 10 year, 1 Billion Dollar, SRS Security Contract Re-Compete.
- SR: Progress made related to qualifications included: an FR at AMCP completed his initial written FR exam; an FR at Assistant Manager for Closure Project (AMCP) completed the initial FR qualification written exam and oral board; and an FR at AMNMSP re-qualified in SRNL.
- WVDP: Monthly meetings with senior contractor management have been very successful in building a positive working relationship and mutual understanding of the safety and performance expectations and requirements.
- WVDP: The FR promoted weekly look ahead meetings that the contractor initiated this quarter to communicate near term and longer term work activities to the entire work force. Positive employee feedback has resulted.

NUCLEAR ENERGY, SCIENCE, AND TECHNOLOGY

Facility Representative Program Performance Indicators (4QCY2007)

<u>Field or Ops Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
ID (NE)	11	11	11	100	1	100	91	43	74
NE Totals	11	11	11	100	1	100	91	43	74
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

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** % Oversight Time includes % Field Time

NE Facility Representative (FR) Highlights:

- ID (NE): A Reactor Technology Complex (RTC) FR identified that the Daily Summary Reports of plant equipment status contained inaccurate information due to the lack of a formal review and approval process. As a result, the contractor has implemented a process to ensure that these reports receive appropriate review prior to release and use.
- ID (NE): A Specific Manufacturing Company (SMC) FR discovered sub-contractor personnel conducting grinding operations in a radiologically controlled area who were not using the proper flame retardant Anti-contamination clothing and respiratory equipment as specified in the RWP. The hot work was stopped, the radiological controls for hot work was reviewed and personnel were retrained.
- ID (NE): During this period, the RTC FRs noted several examples of gas bottles improperly stored with less than adequate restraint. The contractor has responded with increased oversight, training, and improved restraint systems.
- ID (NE): One senior FR retired, and a replacement FR was retired. The new FR is currently undergoing qualifications.
- ID (NE): The Materials and Fuel Complex (MFC) FRs identified several operations and maintenance activities and conditions that indicated less than adequate work control practices. As a result, the Contractor issued an ORPS report. Some examples of the FR identified issues include: Installation and calibration of Safety Significant SSC was not conducted in accordance with vendor manual; Less than adequate Zero energy verification; Breathing air system used without approved operating procedure; Loss of commercial power event revealed inadequate procedural use and procedural compliance, weaknesses in systems knowledge, and unclear assignment of responsibilities.
- ID (NE): The RTC FRs noted that winterization activities were not being completed on time. Several areas of immediate concern were presented to the contractor for immediate correction.

NATIONAL NUCLEAR SECURITY ADMINISTRATION SITES

Facility Representative Program Performance Indicators (4QCY2007)

<u>Site Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
LASO	14	14	9	64	0	89	56	38	64
LSO	10	10	10	100	1	90	60	44	70
NSO	10	10	8	80	0	75	75	54	72
PXSO	10	10	10	100	1	100	60	48	85
SRSO	4	4	4	100	0	100	75	44	82
SSO	11	11	11	100	0	100	91	38	70
YSO	12	11	11	92	2	91	73	45	71
NNSA Totals	71	70	63	89	4	92	70	44	73
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

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NNSA Facility Representative (FR) Highlights:

- LASO: An FR identified a repeat TSR Violation of SAC on the storage of HP cylinders within PF-4.
- LASO: An FR performed an assessment of the waste storage program at RLWTF and provided the contractor with recommendations for addressing several issues identified. These issues have been documented.
- LASO: An FR persuaded Area G management to hold a critique on a pallet pushing event in Dome 48. On October 15 a LANS forklift driver pushed a pallet containing four banded TRU waste drums approximately 75 feet across the floor of Dome 48. A spotter was present at the time but did not observe the activity. Corrective actions included retaining forklift drivers, revising the forklift operations procedure, inspecting the affected forklift for signs of damage, and taking disciplinary action against the workers involved.
- LASO: An FR persuaded Environmental and Waste Management Operations (EWMO) management to call a TSR violation for the Waste Characterization, Reduction and Repacking Facility (WCRRF) accepting unvented containers.
- LASO: The Staffing Analysis approved on November 26, 2007 increased staffing level from 11 to 14. One FR is on an extended detail to DOE-HQ. There is a hiring action in progress for one FR, while certification lists are being prepared by HR for additional FR vacancies.
- LSO: FRs performed Conduct of Operations surveillances and identified issues relating to lack of formality in log keeping practices and lack of verification techniques for independent verification.
- LSO: One FR completed his initial qualification, and two FRs completed their re-qualification. In addition, two FRs are expected to complete their initial qualification during the next quarter.
- LSO: One FR retired during this period.
- NSO: During the previous quarter, NSO received a resignation from an FR who has moved on to full time military duty. NSO has replaced that person with a Future Leader's Program participant, thus making staffing levels eight total. This FR is still in the qualification process.
- NSO: FRs have initiated a proactive approach to shadowing the contractor's self assessment process

implementation. This effort is geared toward enhancing the maturity and effectiveness of the NSO (line) and M&O contractor Line Oversight/Contractor Assurance System as implemented within the NTS user community. The results of shadowing are being factored into the NSO integrated Master Assessment Schedule and utilized for future federal assessment planning purposes.

- NSO: Two FRs were recognized and awarded for their efforts by Defense Programs for their involvement with the Unicorn subcritical experiment.
- PXSO: One FR accepted a position at DOE-HQ and left the FR program in November. His position was backfilled by an NNSA Future Leader.
- PXSO: Three FRs completed their Phase II comprehensive exams in December and are now preparing for evaluated walkthroughs of facilities and oral boards. Completion is anticipated before the close of the next quarter.
- SRSO: An FR completed his initial Tritium qualifications.
- SSO: An FR identified and ensured development of a Sandia corrective action plan for nuclear facility fire damper actuators that had been previously recalled by the manufacturer.
- SSO: An FR participated in the DOE review of the Emergency Planning and Hazards Assessment (EPHA) for Building 858N, Silicon Fabrication Facility and Building 897: Integrated Materials Research Laboratory at SNL. Identified during the review by the FR were inconsistencies in the actual configuration of the building and its systems.
- SSO: An FR performed duties as the Assistant Team Leader for NNSA/SSO Nuclear Materials Storage Facility Phase 1 Operational Readiness Review.
- SSO: FRs participated in the Line Management Review for the startup and completion of the Logistics Nuclear Operations, which resulted in the successful transport and re-storage of critical nuclear materials.
- YSO: A former FR of the Year rejoined the FR organization.
- YSO: An FR identified an inadequate LOTO application on a hazardous chemical system. The LOTO tag was applied to a valve at the sodium hypochlorite tanker station using a clamshell locking device that was too large for the valve handwheel, i.e., the valve handwheel could slip out of the locking device without opening the lock. The improper LOTO device was quickly replaced with a better-fitting device.
- YSO: An FR identified Beryllium contaminated materials being stored outside of the Beryllium Storage Areas. All material was relocated to appropriate areas, and two Beryllium Storage Areas were added to the facility.
- YSO: An FR was involved offsite in the performance of a Contractor/DOE Readiness Assessment at the ORNL Molten Salt Reactor Experiment.
- YSO: Several FRs performed oversight during operations of the 9215 enriched uranium special metalworking equipment including oversight during first-use evolutions. This infrequently run equipment had not been operated in more than nine months.

OFFICE OF SCIENCE SITES

Facility Representative Program Performance Indicators (4QCY2007)

<u>Area/Site Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
ASO	5	5	5	100	0	100	100	26	82
BHSO	6	6	5	83	1	100	40	41	86
FSO	2	2	2	100	0	100	100	48	93
OR (SC)	5	5	4	80	0	100	100	41	69
PNSO	3	3	1.5	50	0	67	67	48	83
SC Totals	21	21	17.5	83	1	97	80	38	82
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

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** % Oversight Time includes % Field Time

SC Facility Representative (FR) Highlights:

- ASO: An FR completed a comprehensive review of the ANL Fire Protection Program. This identified several areas of noncompliance which ANL will address.
- ASO: FRs provided guidance to ANL in developing controls at four ANL nuclear facilities. The improved controls are resulting in enhanced compliance with nuclear safety requirements.
- BHSO: An FR was teamed with subject matter experts (SME) and reviewed the High Flux Beam Reactor DSA for D&D for subsequent approval.
- BHSO: An FR reviewed for approval several conduct of operation matrices.
- BHSO: FRs were involved in a variety of activities this quarter that do not qualify as direct Field Time. These activities were deemed important for sustaining and improving BHSO's oversight of BNL and to DOE's complex-wide, overall mission. These included activities related to PAAA and 10 CFR 851, preparation of a corrective action plan from the HSS visit in August 2007, Radiological Assistance Program (RAP), and performing safety and industrial hygiene responsibilities due to one Subject Matter Expert leaving DOE.
- BHSO: One FR left DOE to work in the private sector. His vacancy is expected to be filled soon. Two interim qualified FRs are expected to be fully qualified during the next quarter.
- BHSO: Several FRs identified contractor LOTO deficiencies.
- FSO: FRs were involved in the development of a Technical Qualification Program (TQP) being led by the DOE Chicago Integrated Support Center.
- FSO: FRs were involved in the SCMS procedure development as well as the review of completed procedures.
- FSO: FRs were involved with the coordination and participation in the review of the Fermilab Contractor Assurance System program.
- OR (SC): FR coverage continued at the High Flux Isotope Reactor, the Non-Reactor Nuclear Facilities, and the ORNL Accelerator Facilities.

- OR (SC): The process of hiring a FR to fill the vacant slot continued.
- PNSO: An FR continued monitoring construction activities including the excavation of the four buildings comprising the Physical Science Facility (PSF), the renovation of the Environmental Molecular Science Lab (EMSL) electrical system, and the construction of the EMSL office addition.
- PNSO: An FR continued monitoring the contractor's recovery actions for the plutonium-238 contamination discovered both on-site and off-site that resulted from a sealed source that leaked plutonium-238 in June 2007.
- PNSO: An FR has been participating as the site representative on the Source Evaluation Board evaluating the re-bid of the PNNL contract since the beginning of April 2006. This assignment is anticipated to last at least through September 2008 and amount to approximately 0.5 FTE of time. No replacement is currently approved, so the FR staffing will show a reduction of 0.5 FTE during this period.
- PNSO: The process is underway to hire an additional FR.